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Study: ERs Show No Improvement in Appropriate Antibiotic Use for Adults

Although there is a decline in inappropriate use of antibiotics to treat acute respiratory tract infections (ARTIs) in many outpatient settings, the number of adults still receiving those antibiotics in emergency departments (ED), is high, according to a study abstract published by the *American Society for Microbiology*.

Researchers analyzed data from 2001-2010 from the National Hospital Ambulatory Medical Care Survey, identifying patients with ARTIs and rates of antibiotic use, classified as either antibiotic-appropriate or antibiotic-inappropriate, according to the abstract.

There were 126 million ED ARTI diagnoses, with 61 percent warranting antibiotics. Over the course of the study, antibiotic-inappropriate use decreased in children less than 5 years old and young people ranging from 5-19 years old, but remained stable for adult patients in the 20- to 64-years-old age range. In fact, quinolone use for ARTI increased from 83 per 1,000 to 105 per 1,000 visits over the life of the study.

ARTIs, including rhinitis, sinusitis and bronchitis, account for nearly one tenth of ambulatory care visits across the country, but are caused by viruses, not bacteria, and when treated with antibiotics can lead to antibiotic resistance.

Why Fewer Beds Could Mean More Effective ICUs

Fewer beds intensive care unit beds (ICU) could help curtail variation in service use, according to an opinion piece published in the *Journal of the American Medical Association*.

Intensive care accounts for approximately 3 percent of healthcare spending and nearly 1 percent of gross domestic product (GDP). By contrast, in the United Kingdom (U.K.), intensive care accounts for only 0.1 percent of GDP.

According to the article, in the U.K., there are only five ICU beds per 100,000 people, and they are used almost exclusively for patients at a high risk for death. In the United States, however, there are 25 ICU beds per 100,000 people, and many ICU patients are admitted simply for observation. At the same time, compared with patients in the U.K., substantially more patients in the U.S. die in the ICU, suggesting that increased bed availability appears to reduce the incentive to keep dying patients out of the ICU.

The article ties this correlation to the economic concept of demand elasticity--the idea that a product creates its own demand. Just as the creation of a new lane on the interstate highway can lead to increased traffic as new drivers seize the opportunity to travel on the larger road, new critical care beds can lead to increased use. As supply constraints are removed, clinicians are more likely to use the service, even for patients unlikely to benefit."

Ideally, organizations would target ICU admissions for critically ill patients who would stand the greatest chance of benefiting from ICU care. With a reduced ICU bed supply, hospitals would have the incentive to keep patients who would benefit from care elsewhere, out of the ICU, the article concluded.

Save the Date

Please note: While the information below is a list of planned programs for 2014, at this time not all programs can be accessed online for registration.

March 21	Improving Community Health Through Wellness and Nutrition (rescheduled from Nov, available for registration)
March 31	Statewide Perinatal Safety Learning Collaborative
April 4	Transforming Care at the Bedside
May 8	Preventing Readmissions and Improving Transitions in Care (co-provided with HQSI)
May 13	CUSP for ESRD in New Jersey
May 20	Reducing Healthcare-Acquired Infections Using a Collaborative Approach
May 29	Adverse Drug Events

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